

Vol. XII

No. 5

The **CHEMIST**

MAY • 1935

Publication of The AMERICAN INSTITUTE of CHEMISTS

**ANNUAL MEETING
OF THE
INSTITUTE
• • •
ANNUAL REPORTS**



Good News! FOR CHEMISTS



BAKER'S C. P. ANALYZED REAGENTS NOW PACKAGED WITH

MOLDED PLASTIC CAPS • WIDE MOUTH BOTTLES
CLEAR VISION GLASS • TAMPER-PROOF PACKAGES

In keeping with the high quality standards of Baker's C. P. Analyzed Reagents, we are pleased to announce, after a long investigation, further improvements in packaging.

For a number of months, all chemical salts have been packaged in wide mouth easy-access bottles. With the exception of a few chemicals that are affected by light, these bottles are of clear vision flint glass.

Effective immediately, metal caps are discontinued. Instead, Baker's C. P. Analyzed Chemicals will be packaged with a non-corrosive molded plastic cap sealed with a viscose tamper-proof band. During the period of change, while both packages are in stock, molded caps will be supplied to those customers who so specify.

More than 60 representative chemical jobbers stocking Baker's Analyzed Reagents are now in a position to supply you these new and improved packages. They are provided for your added convenience and protection.

J. T. BAKER CHEMICAL CO.

PHILLIPSBURG, NEW JERSEY

New York

Philadelphia

Chicago



SPECIFY AND INSIST UPON

"Baker's Analyzed"

The CHEMIST

Publication of

THE AMERICAN INSTITUTE OF CHEMISTS, INC.

ALAN PORTER LEE, F.A.I.C., *Editor*, 233 Broadway, New York City

V. F. KIMBALL, *Assistant to the Editor*

VOLUME XII

MAY, 1935

NUMBER 5

TABLE OF CONTENTS

	Page
Editorial.....	225
Annual Meeting and Dinner.....	227
Institute Emblem.....	228
New Councilors.....	228
A Challenge to the Chemical Profession. WALTER J. BAÑZA, F.A.I.C.....	229
Student Recipients of Medals.....	231
Report of Committee on Design of Student Medal.....	234
Secretary's Annual Report.....	235
Treasurer's Annual Report.....	237
Report of Washington Chapter.....	238
Report of New York Chapter.....	239
Report of Niagara Chapter.....	240
Report of Pennsylvania Chapter.....	243
Report of Committee on Unemployment.....	245
Book Reviews.....	247
Institute Notes.....	251
New Members.....	260
News.....	261

Entered as second-class matter February 28, 1930, at the Post Office at Easton, Pa.,
under act of August 24, 1912.

Issued monthly except in June, July and August at 20th and Northampton Sts., Easton, Pa.
Subscription price, \$2.00 a year. Single copy, 25 cents.

Copyright, 1935, by The American Institute of Chemists, Inc.

ANGLE CENTRIFUGES

Special Advantages

The angular position greatly increases the rapidity of the separation.

Particles, the specific gravity of which is slightly higher than the fluid, are quickly separated.

The bowl presents very slight resistance to air, so that only a small amount of current is required.

These centrifuges need not be bolted to any base place, can be moved about if desired, and have practically no vibration.

Motors are adapted for any kind of current up to 240 volts.

Especially recommended for the testing of blood and urine. The large sizes are used in the clarification of serum.

Write for Bulletin No. 528

EIMER & AMEND

Est. 1851

Inc. 1897

Headquarters for Laboratory Apparatus and Chemical Reagents

Third Ave., 18th to 19th St.

New York, N. Y.

PROFITABLE INVESTMENT

The CHEMIST presents constructive ideas on present-day industrial, economic, and professional problems.

If you are interested in chemistry, why wouldn't it be a good idea to send us two dollars and receive *The CHEMIST* every month?

.....
The CHEMIST

233 Broadway

New York, N. Y.

I am enclosing \$2.00 for one year's subscription.

Name

Address

.....

EDITORIAL

A place in Chemical Industry for the educated man who is not a chemist, but who has a knowledge of chemistry.

ON PREVIOUS occasions we have stressed the importance of adequate training for the profession of chemistry and pointed out that the chemist must be trained not only to ascertain the facts of chemistry but also to use these facts in the solution of chemical problems. These problems are often complex and their solution demands a thorough plan of attack based on a wide knowledge of the related facts which bear on each case. The scope of the problem must be clearly visualized before a comprehensive plan can be prepared. A narrow view of the problem is bound to lead to misdirected effort and disappointment in results. The solution of chemical problems must therefore be entrusted to qualified chemists. Only such persons should be recognized as members of the profession of chemistry.

There appears to be much confusion of thought concerning the question—What is a chemist? It seems to us that this difficulty arises from a lack of appreciation of the work to be done by chemists. This may be charged directly to the schools training chemists. They have offered chemical courses to all who wished to take them as a part of general education and did not differentiate sufficiently between the study of chemistry as a foundation for the training of chemists and the study of chemistry for its cultural and educational values. This was understandable when there was practically no profession of chemistry in the United States. Then chemistry was a prerequisite for medical school or was given as a part of the preparation for the teaching of the science of chemistry. Research was confined largely to the universities and was conducted in connection with teaching. The teacher of chemistry who was an investigator of restricted types of chemical problems did not have to consider the economic phases of chemical investigations and was not compelled to face professional problems which require for their solution professional solidarity. Hence, there was no professional consciousness developed.

There is a difference between adequately trained chemists and persons who have had some chemistry as a part of their college education.

It is pertinent to consider these in two categories rather than one. Today both groups leave the academic halls to seek employment in chemistry without adequate knowledge of what they wish to do or what they are capable of doing. There is a place for chemists and there should be a place in society for educated men who have a fair knowledge of chemistry. The latter group certainly should not undertake the solution of chemical problems. They are not chemists. They should qualify for positions in industry where their chemical knowledge will place them at an advantage over other educated men who have no knowledge of chemistry. It is this group of men who should do the auxiliary work essential to making creative chemistry function in society. If they have the other requirements, such as economics and a business sense, as well as the personality essential to success in business, they should strive to fit themselves for the work of purchasing and selling of chemical commodities.

It is pertinent to point out that a broad training is essential for the chemist and also for the person who is to function in an auxiliary capacity to the chemist in the chemical industry.

The chemist must know men and be able to recognize the significances of the problems which he has to solve. It is essential that he should know something about economics and psychology. It is also highly important that he should be able to convey to others the information which he has secured in his investigations.

For the man who has studied chemistry and who wishes to use it in chemical industry in the purchasing and selling of chemical commodities it is of course highly important that he should know the essentials of economics and that he should have an adequate knowledge of psychology. A knowledge of chemistry should be of inestimable value to purchasing agents and salesmen in the chemical industry. Persons with chemical training may then serve the chemical industry efficiently in positions other than that of chemist.

We must not confuse the issue by considering as chemists all who have some knowledge of chemistry and serve in the chemical industry.

M. L. CROSSLEY, F.A.I.C.

Institute Annual Meeting

Thirteenth Annual Meeting held at Atlantic City, May eighteenth. Three new councilors elected. Chemists can carry out projects for public welfare which deserve support from Government appropriations. What project is of greatest value to society was the topic discussed at the Annual Dinner.

ON SATURDAY, May eighteenth, the Thirteenth Annual Meeting of The American Institute of Chemists was held at the Hotel Claridge, Atlantic City, N. J., at three P. M., preceded by a National Council meeting and luncheon. Minutes of both meetings may be found under "Institute Notes." The election of H. T. Clarke, W. T. Read, and N. A. Shepard as councilors to serve from 1935 to 1938, was announced.

The Annual Dinner was held at seven P. M. at the same hotel. Representatives of the various Chapters were prepared with plans for suitable projects for public welfare, capable of being carried out only by chemists, which would be worthy of government support from the recent four billion dollars allotment. Among suggestions for a constructive program to employ chemists were: public health projects to be carried out under the supervision of the Federal Health Department, which has been limited heretofore by lack of appropriations; a system of public education to fit individuals into professions for which they are best suited, and to keep those in professions abreast of the latest advances in their profession; chemical research projects to obtain fundamental information about common materials; projects to insure good water supply to all cities; studies to reduce the hazard of automobile accidents due to faulty road construction materials, or colors; a chemical survey of all natural resources; development of new industries to use farm products or supposedly useless natural products; the correlation of chemical information obtained by various bureaus, laboratories, etc., in widely separated fields. A committee to make recommendations for a project and for the carrying out of plans concerning it is being appointed.

Emblem of The American Institute of Chemists



This emblem was formally adopted by the members of The American Institute of Chemists at the annual meeting held on May 18, 1935, at Atlantic City, N. J.

The Committee on Insignia chose this design from several submitted, and the National Council also accepted it subject to approval by the membership.

Dr. D. D. Berolzheimer, F.A.I.C., designed this emblem from the alchemists' symbol meaning "the essential thing" surrounded by a circle symbolizing "all embracing."

New Councilors

At the Annual Meeting the following new Councilors were elected to serve terms expiring April 30, 1938:

HANS T. CLARKE, *Professor of Biological Chemistry*, College of Physicians and Surgeons, 630 West 168th Street, New York, N. Y.

W. T. READ, *Dean*, School of Chemistry, Rutgers University, New Brunswick, N. J.

NORMAN A. SHEPARD, *Director of Chemical Research*, Firestone Tire and Rubber Company, Akron, Ohio.

A Challenge to the Chemical Profession

By Walter J. Baēza, F.A.I.C.

A lucid presentation of the problem discussed
at the Annual Dinner

IN AN article appearing in THE CHEMIST for January, 1933,¹ The American Institute of Chemists was warned to prepare for the planned economy it was predicted would follow the system of *laissez faire*. In that article it was suggested that the Government would plan a vast reserve of public work projects which could be thrown into the breach when industry faltered in the maintenance of pay-rolls and withdrawn as purchasing power took up the industrial slack, or labor shortage threatened private enterprise.

In 1933, it seemed we must wait for the turn in the cycle to make funds available for this planned government balance-wheel. Industry was reporting greater deficits each month. Private incomes were decreasing. It did not seem possible that the Government would increase the burden on these resources by sufficient taxation to create the reserve spending power required to make planned public works immediately available. But the plan that was then predicted would follow recovery and prevent future depressions has been adopted to break this depression. The Government has issued a lien on the future, backed by potential wealth. Four billion dollars is available for public works.

When the depression came with concomitant increase in unemployment, the engineers were ready to lay before the proper authorities definite well-planned projects. Now again they are ready to offer projects that call for allotments from this fund to engineering interests and give employment to engineers. Now again the thoughtful chemist must feel shame that his profession is not ready with any plan.

What are we waiting for? What will make the chemist conscious of his professional place in American progress? Will these words pass as unheeded as those of eighteen months ago? We are as sure today as we were then that there is enough important work to be done by men trained in colleges and industry in the science of materials to employ every one of them and bring enough business to chemical industry to keep operations at capacity.

¹ "When Prosperity Returns," Baēza.

As we said then, there are men with the ability and imagination to see the work that should be done, that must be done sooner or later under public initiative for the public welfare—work that is the special province of the chemist. We repeat again that there are leaders in our profession capable of planning such projects on a national scale, and men who can execute them honestly, efficiently, and expeditiously. Why are the chemists bound by almost criminal inertia?

But perhaps the question should be not "Why," but rather "Who." The question indeed may be not "Why do we not act," but rather, "Who will lead the action." It is possible that the introvert training of our profession makes our leaders unaware that thousands of chemists wait on them for leadership. It is possible that no professional group considers itself the logical nominator of leaders for this high and difficult office. But such leadership is vital. The work should be done. It must be done if the profession is to take its rightful place in national life. While we wait for leaders to volunteer, while associations hesitate to demand leadership, chemists of all ranks suffer unemployment and chemical industry trails in the race for recovery.

A joint conference of representatives of agriculture, industry, and science was held at Dearborn, Michigan, on May 7th and 8th. The conference was called by Mr. Francis P. Garvan, President of The Chemical Foundation, and its purpose was to survey the variety of farm products which may be usable in industry and to develop a plan for the increasing use of American farm products in American industry, through the cooperation of agriculture, industry, and science.

THE CHEMIST is not issued during June, July, August. The September number is scheduled for publication on September 15th. A feature article will be "The Chemist in the Pulp and Paper Industry," including a brief history, the training necessary for chemists in this field, the scope of their duties, and present and future prospects in this industry for chemists.

Students Awarded
Student Medals and Junior
Memberships
for
"Scholastic Achievement"
New York Chapter Awards—1935



JOHN W. PLAUKA
Rutgers University



HANNAH ELIZABETH CHELIUS
St. Elizabeths College



JOHN BOUSTEAD
Stevens Institute of
Technology



SOL KIPNESS
Brooklyn College



ISIDORE ADLER
College of the City of
New York

Washington Chapter Awards—1935



HILLMAN C. HARRIS
University of Maryland



LOUIS ROBERT HEISS
American University



FRANCIS PATRICK MCGRATH
Georgetown University

Harry L. Clark, Jr., of George Washington University, was also awarded a medal and membership, but his photograph was not available for this issue of THE CHEMIST.

Niagara Chapter Award—1935



JOHN E. SEUBERT
University of Buffalo

San Francisco Convention

Chemists attending the San Francisco meetings of the American Chemical Society, to be held August 19th to 23rd, may take advantage of special arrangements made by THE CHEMIST with the Dollar Steamship Line for 14 or more chemists to receive discounts below the regular fares. Please communicate with THE CHEMIST.

Report of Committee on Design of Student Medal

Credit for the idea of presenting a medal and Junior membership in the Institute to high-ranking chemistry majors at local colleges must be given to the Washington Chapter, who offered the plan last year, expecting to make the award only to colleges in their own city.

The Council decided that such an award should be made a national, rather than a local award, voted to assume the expense of having such a medal made, and to have it available to all present or future chapters of the Institute, on conditions that were left to the Educational Committee, subject to the approval of the Council.

Designs and estimates were solicited last fall, and finished samples were submitted with the Committee's final report at the January Council meeting. The medal, in gold bronze on a green ribbon bears on the obverse, in a border, the words:

AWARD of the AMERICAN INSTITUTE of CHEMISTS

also, in the center of a wreath:

FOR SCHOLASTIC ACHIEVEMENT

The reverse has been left blank so that it can be engraved with the name of the winning student, the school, and the date.

It was further decided by the Council that these medals are to be available to the Chapters at cost, plus the cost of the engraving; the year's dues for Junior membership to be paid from the national treasury.

Your committee considers that this award of a medal to promising students of chemistry should serve as a valuable means of publicity for the Institute, and it is hoped that all chapters will take advantage of this opportunity. (Further details of the manner of awarding the medal are to be covered in other reports.)

Respectfully submitted,
FLORENCE E. WALL
Chairman

Secretary's Annual Report

By Howard S. Neiman, F.A.I.C., Secretary

Review of the Institute's Progress during the year ending May 1, 1935.

THE general economic conditions which have existed during the past Institute season were naturally reflected in the condition of the Institute, although the following statistics will indicate that it has maintained its position remarkably well under the circumstances.

The National Council held ten meetings during the past Institute year, at which the average attendance of Councilors was eight.

The following actions were taken during the season:

ELECTIONS

Fellows.....	14
Associates.....	4
Juniors.....	3
	—
Total.....	21

LOSS OF MEMBERSHIP

Resignations: Fellows.....	13
Associates.....	4
Junior.....	1
Deceased: Fellows.....	4
Associate.....	1
Honorary.....	1
	—
Total.....	24

DROPPED FROM MEMBERSHIP

Fellows.....	68
Associates.....	13
Juniors.....	13
	—
Total.....	94

PRESENT MEMBERSHIP

Fellows.....	510
Associates.....	86
Juniors.....	58
Honorary.....	6

Life.....	2
Student Members.....	4
<hr/>	
Total.....	666
Membership May 1, 1934.....	763
Membership May 1, 1935.....	666
<hr/>	
Decrease in Membership.....	97

It is well to note, however, that of the 94 members dropped during the past season 24 were delinquent from 1930, 32 were delinquent from 1931, and 31 were delinquent from 1932. It will thus be seen that 88 of the 94 dropped from membership had indicated by their non-payment of dues that they were not sufficiently interested in the Institute to make carrying them upon the membership rolls advisable. This is the first time for a number of years that this seemingly drastic action has been taken, but it is believed that the result is beneficial as the present number of members includes only those who are sufficiently interested to continue the payment of their annual dues.

In view of communications received from many of the members, the National Council deemed it advisable to reduce the dues of Fellows from \$10.00 to \$5.00, and it is believed that, while this reduction will naturally curtail the amount of dues received from the present members, this will be more than offset by this special inducement in obtaining new members during the coming season.

The Committee on Membership has outlined a seemingly effective method for presenting the Institute to qualified chemists in such a manner as to influence them to become members, and this method will be placed in active operation at once. It is trusted, however, that the membership at large will not depend upon the Membership Committee to increase the number of our members and that each member should consider it his personal duty to make himself a committee of one to present the Institute to his qualified chemist friends.

The National Council has instituted Student Medals to be granted to those students in the senior class of accredited colleges who have exhibited leadership, excellence in scholarship, and character, for the purpose of stimulating interest in the science of chemistry and the profession of chemist. These candidates are to be suggested to the National Council by the various Chapters.

The Committee upon Medal Award suggested that in view of the circumstances, no medal be awarded this year, and this suggestion was adopted by the National Council.

In order that the Institute might have a part in the Tercentenary of American Chemical Industry, a special number of THE CHEMIST was issued containing the contribution of the chemist to the various branches of the chemical industry for the advancement of modern civilization, which is probably the first publication of this character ever published, and it has received high commendation from many of its readers.

A luncheon of the Institute was held during the Tercentenary at which time Dr. Crossley, Dean Jacob G. Lipman of Rutgers, Dr. Marston T. Bogert, and Mr. Frank G. Breyer addressed the attendants upon the necessity for The American Institute of Chemists and its importance to American chemists, special stress being laid upon its possibilities as a factor in relieving the unemployment situation among chemists.

The present healthy condition of the Institute is due largely to the efforts of the Councilors and a few of the other members of the Institute, and it is most earnestly impressed upon the membership at large that the burden of increasing the membership and of advising non-members of the Institute of the importance of an organization of its character should be an individual duty, as only by this means can it be placed in a prominent position in the chemical world, which it properly and justly deserves.

Respectfully submitted,

HOWARD S. NEIMAN

Secretary

Report of the Treasurer for the Year May 1, 1934 to April 30, 1935

By A. P. Lee, F.A.I.C., *Treasurer*

ANNUAL STATEMENT

INCOME AND EXPENSE ACCOUNT—MAY 1, 1934—APRIL 30, 1935

Income

Cash Balance, May 1, 1934.....		\$ 101.04
Receipts:		
Dues.....	\$4,110.16*	
Advertising (total).....	604.50	
Subscriptions.....	45.88	\$4,760.54
Miscellaneous Credits.....		7.02
Total Income through April 30, 1935.....		<u>\$4,868.60</u>

Expenditures

Rent.....	\$ 500.88	
Salaries.....	1,820.00	
Supplies, Postage, Telephone, Miscellaneous, etc.....	583.59	
Refunds to Chapters.....	326.49	
1934 Annual Meeting.....	130.68	\$3,361.64
<hr/>		
THE CHEMIST:		
Printing.....	\$ 806.80	
Editor.....	150.00	956.80
<hr/>		
Total Expenditures through April 30.....		\$4,318.44
<hr/>		
Cash Balance April 30, 1935.....		\$ 550.16
<hr/>		

* Includes \$83.25 of 1933-1934 dues; \$22.00 of 1935-1936 dues; and \$5.00 of 1936-1937 dues.

Report of the Washington Chapter

THE Washington Chapter of the American Institute of Chemists held five meetings during the 1934-1935 season. Two of these meetings were closed meetings confined to business. Three open meetings were held at which three speakers spoke on subjects as follows: Doctor T. Swann Harding of the Department of Agriculture, "Can Science Be Humanized?" Doctor Wilmar Souder of the National Bureau of Standards, "The Technical Man in Court." Doctor Paul R. Heyl, also of the Bureau of Standards, "Science and Philosophy."

The attendance at these meetings was very gratifying.

The principal activity of the Washington Chapter during the past year has been the putting into effect of the previously made plans for the awarding of the student medals. Invitations have been issued to and acceptances received from the University of Maryland, George Washington University, Georgetown University, American University, and Catholic University.

There are sufficient funds in the treasury to provide for operations during the coming fiscal year.

Respectfully submitted,
J. W. MCBURNEY,
Retiring Chairman

Report of the New York Chapter

THE New York Chapter has not a great deal to report in the way of actual accomplishment and activity during the past year. At the beginning of the year the Chapter Council decided that we would restrict our scheduled meetings to four, instead of six, as heretofore, mainly for financial reasons. These four meetings, as arranged by our program committeeman, Mr. Ephraim Freedman, of the R. H. Macy Co., were very interesting and successful, with the average customary attendance at three of them, and an unusual attendance at one—an illustrated lecture on microchemistry by the chemical department staff of the downtown branch of New York University.

Sparing you all detail as to these four meetings, I would like to mention the fact that at our last regular meeting on May 3, 1935, Mr. Frederick Kenney, Chief Chemist for the Dept. of Purchase, New York City, and also one of our National Councilors, was the speaker. During the course of his talk on "The City Chemist," he made mention of the fact that the man in the New York City administration who has charge of the classification of city employees, a Mr. Finnegan by name, had conferred with him with regard to the possibility of securing the assistance of an organized body of chemists such as ours, in this matter of classification of at least the city chemists. While the idea was not fully developed on the floor of the meeting, we realized that there were possibilities in the request, and a committee was straightway appointed, with Mr. Kenney as Chairman, with power to confer and advise with Mr. Finnegan as to how the American Institute of Chemists might be of the greatest assistance in such a connection. This committee will report their progress at the next Chapter Council meeting, and we are very much in hopes that something really worthwhile may come of it.

The Chapter Council at its last meeting, on May 3rd, considered the proposal of the National Council as to the college medal award idea, and approved of it. The New York Chapter, for itself, restricted these awards to ten colleges in our district, these ten being selected from a list of eighteen by a ballot of the Council, and also decided to make the award for only one year, awaiting the results of this year's awards before deciding upon whether to continue it.

Our annual Chapter meeting was held on the afternoon of May 15th, and the past year's officers, councilors, and chapter representative were all re-elected with one exception, Mr. J. W. H. Randall replacing Dr. Saarbach, who declined renomination on the ground that he was getting too old to actively participate.

(Please turn to page 249)

Report of the Niagara Chapter

THE past year has seen the Niagara Chapter definitely entrenched as an active working unit among the chemists of this territory. It has cooperated and coordinated its work with the local chapter of the American Chemical Society in such a fashion that both organizations have profited. Local industries with one or two exceptions are recognizing the value of the Institute work, and losing their fear that it is nothing but a trade union. The members themselves all feel the meetings of unusual benefit to themselves and are trying to publicize the results in a dignified way that will benefit all chemists in the community. At the symposium on secondary school education, it became increasingly apparent that the grades and specifications for chemists as drawn up by our own requirements for membership would eliminate one of the most perplexing difficulties of the industry—that of defining a chemist.

The Niagara Frontier district is representative of a great variety of chemical industries, and the almost effortless growth of the local Institute chapter here emphasizes the need and the value of such an organization. Our experiences also show that it is by doing work of value and keeping our publicity and standards on a dignified plane that lack of numbers can be overcome. If all the chemists in the United States belonged to the Institute, it would not have members enough to be influential other than by its reputation.

The American Chemical Society has been of tremendous value to the American chemist. Its value can only lie in keeping its work on a high scholastic level. Attempts to mix social work with the scholastic detract from both, and it seems very reasonable that the Institute, in close cooperation with the Society, can relieve the Society of much work which would otherwise detract from the Society's efforts to advance chemistry as a science.

Meetings: Four meetings were held. The first in August, was an outing on Lake Ontario, only the committee work being reported and carried on.

The second was a symposium on cost accounting, the third a discussion of adult education of a chemist, and the fourth a discussion of the requirements for teachers of secondary school chemistry and the value of properly guiding the potential chemist during the educational period. It was pointed out that if the requirements for membership in the Institute were adhered to, the difficulty resulting from under-trained men being called chemists would be eliminated.

The Ethics Committee investigated the local chapter of the Federation

of Architects, Engineers, Chemists, and Technicians very carefully, attending one of their meetings by invitation.

The Welfare Committee did exceptional work in placing local men. Here the facilities of the A. C. S. were voluntarily offered and proved of assistance.

The Publicity Committee continued efforts for local publicity and obtained many favorable press notices. Plans for more widespread publicity of the conclusions and discussions of our meetings among local chemists were made.

The Educational Committee cooperated with the A. C. S. on four symposiums of a very high class. They also cooperated with the local libraries in getting lists of available handbooks from industrial libraries and in other work.

The Membership Committee speaks for itself, the membership increasing from eighteen to twenty-five.

The award of a year's Junior membership and a Student Medal was made to Mr. John Seubert, Jr., of the University of Buffalo.

The finances of the local Chapter improved somewhat during the year.

In closing, the Niagara Chapter wishes to call attention to their request for an option on having the 1936 meeting in Buffalo.

Respectfully submitted,

ARTHUR J. NORTON, *Chairman*

Supplementary Report of the Niagara Chapter

"That the programs for these quarterly meetings of the Niagara Chapter be of a high order so as to attract able chemists in this area," thus did William J. Cotton, first chairman of the newly organized Niagara Chapter of the American Institute of Chemists, express a precept which has guided the chapter through its two and a half years of profitable activity and wholesome growth. Meetings consisting mainly of informal, round-table discussions of the relations of the chemist toward his employer, his fellow chemists, and the political and social institutions of his community, served to further the high ideals of the Institute for the advancement of the profession, without in any way duplicating or conflicting with the activities of the local section of the American Chemical Society, which, incidentally, are supported wholeheartedly by the members of the Institute, many of whom are serving on

the executive committee of the Western New York Section, A. C. S.

In several of the symposia conducted by the Niagara Chapter, the members themselves were successful in developing the topic without the aid of outside speakers. Such subjects as "The Chemist in Industry," "Industrial Research," "Professional Ethics," and "Contracts" were analyzed in detail by the membership, each having been asked to study a specific phase of the topic prior to the meeting. A discussion of the methods which a chemist with limited time at his disposal might employ to acquaint himself with recent advances in his own and related fields, while not neglecting his social and political responsibilities or his cultural development, brought forth many amusing anecdotes and a host of valuable suggestions; for each individual present described the practical and, in many cases, unique systems which he had devised to keep informed regarding his own special interests and hobbies.

For some of its meetings, the Chapter was fortunate in securing as speakers, men recognized as experts in their particular fields. The symposium on "Licensing" was enriched by opinions from representatives of the medical, legal, and engineering professions who held executive positions in their own professional associations, while the state senator from this district explained the legislative attitude toward bills for the licensing of professional men. At the meetings devoted to discussions of "Costs" and of "Pensions, Insurance, and Compensation," experts in their respective fields were persuaded to express their opinions and explain highly technical points. No meeting of the Chapter has ever been entirely monopolized by a single speaker, a certain part of the available time having invariably been set aside for reports and discussions by the members themselves.

This year, the Niagara Chapter has joined with the Western New York Section of the American Chemical Society in sponsoring a series of seminars which are being held at the University of Buffalo. The interest shown in this new activity seems to insure its continuance. The complete cooperation of these two local groups in all cases where their interests border or unite provides positive proof that the most harmonious relations can exist between the professional and scientific organizations.

Through its committee on Welfare, the Niagara Chapter has obtained employment for a number of local chemists, none of whom happened to be members of the Institute. This activity seems to be a proper function of the Institute and will receive more and more attention as time goes on.

The committee on Professional Education has rendered valuable as-

sistance to the public libraries of Buffalo in the preparation of a directory of the periodicals and reference works available in the numerous industrial and private libraries of the district, so that these might more readily be used for reference purposes when needed. The Chapter has lamented the absence of a chemist on the board entrusted with the selection of new books for the Buffalo libraries, and is endeavoring to secure representation on this board, or permission to make periodic recommendations of publications of a chemical nature which seem likely to be of most interest and service to chemists of the district.

To encourage scholarships and to acquaint students in the local institutions of higher learning with the American Institute of Chemists, the Niagara Chapter has established an award of a student medal and Junior membership in the Institute for an outstanding student of chemistry selected from the senior class of one of the colleges of the Niagara frontier. Favorable publicity will also be directed toward the Institute by the publication by one of the Buffalo newspapers of a series of feature articles written by members of the Niagara Chapter and describing specific chemical industries and activities in the Buffalo-Niagara Falls area.

The practical nature of the programs of the Niagara Chapter and the enthusiasm shown by its members in promoting the ideals of the American Institute of Chemists have attracted some of the most able chemists of western New York. Thus, without resorting to membership drives or any undignified attempts to round up new members, the Chapter has grown, both in numbers and in prestige. Such sound growth augurs well for the future of the Chapter, and for the influence which it will be able to exert for the advancement of the profession.

CHARLES F. SMITH

Report of the Pennsylvania Chapter

THE Pennsylvania Chapter has just brought another highly successful season to a conclusion. In accordance with the principle established last year, several of the meetings were devoted to the discussion of subjects intimately related to the economic status of the chemist.

The following is a list of the meetings held during the year:

Oct. 2, 1934. A discussion on "The Chemist in Public Service," led by Mr. Chapin and Mr. Newitt. Mr. Chapin devoted his attention to the status of the chemist in this country and Mr. Newitt directed the discussion to the public service chemist abroad.

Nov. 3, 1934. Inspection trip through the plants of the Publicker Commercial Alcohol Co. and the Continental Distilling Corp.

Dec. 4, 1934. A discussion on "The Chemist in Relation to the Consumer," led by Mr. Cayo and Dr. Trumper.

Jan. 15, 1935. A discussion on "Experiences in Research," led by Dr. Graham.

Feb. 5, 1935. A discussion on "Licensing the Chemist," led by Mr. Harrison.

Mar. 5, 1935. Talk by Dr. LaWall on the "Early History of Pharmacy and Chemistry."

Apr. 2, 1935. Meeting devoted entirely to the discussion of means for increasing the membership without relaxing the high standards of the Institute.

Sentiments expressed at the March meeting seemed to indicate that while our chapter recognizes the need for an extensive campaign for new members and desires to conform as much as possible to the wishes of the National Organization, we feel that due vigilance must not be relaxed in the selection of these new members. To lower our standards would be to defeat the very purpose for which the American Institute of Chemists exists.

Each member of the chapter was requested to bring with him to the April meeting a list of the chemists whom he wished to propose for membership with a statement of their qualifications. The chapter, acting as a membership committee of the whole, passed upon the proposed new members, and the list of those selected was forwarded to the National Secretary under the sponsorship of the Pennsylvania Chapter.

May 7, 1935. Visit to the Cancer Research Laboratories of the Graduate School of Medicine of the University of Pennsylvania.

The Chapter has continued its active support of the Philadelphia Chemical Council and the Technical Service Committee of the Engineers' Club and is represented on the Industrial Bureau of the Philadelphia Chamber of Commerce.

The Chapter started the 1934-1935 season with a balance in the treasury of \$40.13 and ended the season with a balance of \$8.26 though it has not as yet received this year's rebate in dues.

The following are the officers for the coming year: *Chairman*, Max Trumper; *Vice-chairman*, Louis D. Newitt; *Secretary and Treasurer*, C. W. Rivise.

Respectfully submitted,

H. STOERTZ,
Chairman

Report of Committee on Unemployment and Relief for Chemists and Chemical Engineers

THE Committee on Unemployment and Relief for Chemists, which is sponsored by the American Institute of Chemists, has continued its activities along the lines indicated in previous reports.

Since the beginning of the Committee's work, nearly 2,000 chemists or chemical engineers registered. On May 1, 1934, the active registration was 1,285; of these, 286 secured permanent jobs and 288 were unsuitably employed in either technical or non-technical temporary work. A general canvass was made during the month of May, 1934, and the registration was corrected according to the responses received from this canvass. Since June 1, 1934, to May 8, 1935, the registration increased by 317, but only 55 secured permanent chemical positions. Complete statistical information regarding education, experience, etc., of the present active file can be found in the recent statistical report which was mailed on March 28, 1935, to the secretaries of all the sponsoring societies.

It is gratifying to note that since the inception of the Committee to date financial support has been received from 1,236 contributors, representing practically all the major chemical companies in the greater Metropolitan area. Several group and company contributions have also been received.

During the past twelve months, forty-nine individuals and their families were financially assisted from this fund, either by creating useful work or by loans, food, clothing, etc. Temporary technical or non-technical jobs, lasting from a day to several months, were secured for about 200.

The Committee has kept open house for the members of the chemical profession and has brought courage and confidence to a large number of unemployed who visited this office.

From May 4, 1934, to May 10, 1935, the Committee expended a total sum of \$10,864.36. As mentioned in previous reports, the Union Carbide and Carbon Corporation, American Cyanamid Company, and other donors have kindly given office space, furniture, and other incidental items free of charge. Excluding expenses for telephone, electricity, stationery, postage, and the sum required to collect the funds, every dollar was used in assisting the unemployed.

The American Institute of Chemists can be of assistance to the Committee by giving wide publicity to its work. It should also give ade-

quate consideration to the problems of the individuals in the chemical profession, both in these days of emergency and in normal times.

In order to secure emergency aid for the unemployed, the Institute could approach Federal, State, and City authorities and suggest that they sponsor chemical projects which will bring employment to a large number of qualified chemically trained individuals. The Committee has maintained correspondence with these authorities and has suggested more than twenty chemical projects, none of which has received the desired consideration.

Several suggestions toward the solution of the basic difficulties regarding unemployment were presented in a proposed program dated March 20, 1934, copies of which were also sent to the representatives of the sponsoring societies.

Executives in the chemical industry should be approached and their confidence in the ability of the unemployed should be strengthened. The recent statistical classification (mentioned in paragraph 2) will more than prove qualitatively that from the point of education and experience, those who are unemployed are in no way inferior to those now in jobs. Those conversant with the problems of employment will readily see that in securing or losing a job, a number of factors besides the education and technical ability of the individual are involved. Some of these factors are beyond the control of the individual. The Committee has continuously given thought to these human elements and, through these channels, has brought assistance to a number of worthy cases who lost their jobs through no fault of their own.

The Committee will deeply appreciate continued support and suggestions from the American Institute of Chemists.

Respectfully submitted.

M. R. BHAGWAT, *Secretary*

Articles, news items, chapter reports, or other material intended for publication in THE CHEMIST should be sent to reach the Editor not later than the 25th of the month preceding the issue.

Positions Open

Three positions are open to chemists with B.S. degrees, experienced in food chemistry and with knowledge of sugars; sales ability, and personality. Salary \$200.00 to \$250.00 a month to start.

BOOK REVIEWS

CHEMISTRY AND TECHNOLOGY OF WINES AND LIQUORS. BY HERSTEIN AND GREGORY. *D. Van Nostrand Co., Inc.* Prepublication price \$4.95.

Fulfilling a very great need, the authors have placed between one pair of covers most of the available information on the chemistry and technology of alcoholic beverage production. Anyone who has had occasion to refer to the literature on the subject has been faced with the task of seeking through a great many different volumes and periodicals before finding the required information. This book should save the investigator many hours. Written in a clear easy style, it offers a pleasant review of the subject and, being well indexed, it may be used as a quick reference book.

The chapters on theoretical considerations covering the chemistry of carbohydrates, enzymes, and fermentation are splendidly done. The chapters on manufacturing suffer, somewhat, from brevity; and have not been handled with the thoroughness that distinguishes other sections, but this is offset by the excellence of those sections which outline methods and interpretations of analysis.

The authors have avoided an easy pitfall in the discussion of interpretations by an extremely generous use of tables of typical analyses, thus not injecting their own opinions, which might invite controversy. Instead, these tables may be used as bases for rational interpretations. The section on methods organizes the official methods into a logical order easier to follow than the cross-reference system employed in the original text. On the whole this book will serve as a splendid review of the subject and as a ready source of reference useful to all laboratories which handle alcoholic beverages.

W. B.

QUALITATIVE ANALYSE MIT HILFE VON TÜPFELREAKTIONEN. 2nd Edition. BY DR. FRITZ FEIGL. *Akademische Verlagsgesellschaft.* Leipzig.

Microanalysis has progressed in two distinct ways from its earlier days to its present deserved status as a branch of our chemical science. On the one hand there has been developed a whole new technique which is now regularly a part of the curriculum in many of our schools. On the other hand, however, there has been a less recognized develop-

ment in the science of analytical reactions. Almost a third of Professor Feigl's book is devoted to this comparatively new subject. He devotes eight exceedingly interesting chapters to the theoretical bases of qualitative reactions, including such topics as complex compound types, increasing the sensitivity of reactions, and the specificity of compounds as a property of special atomic groupings.

With this theoretical basis well developed, there follow five chapters of special reactions of various elements and groups, a chapter including a number of systems of qualitative analysis, a chapter on the detection of certain elements and groups in organic compounds, and one on the detection of certain organic compounds. Finally there is a long chapter illustrating the application of the methods to a considerable variety of technical problems.

The book is well made and well indexed. The directions are clear and concise. In the reviewer's opinion, it should serve both as a guide to teachers of analysis and as an almost encyclopedic handbook for analysts.

K. M. H.

Death in the Forenoon*

It is always a great comfort to know that there is a place in town where you can buy poisons and explosives. We patronize Eimer and Amend, down at Eighteenth Street and Third Avenue. They have cheerfully met our potassium-cyanide needs for years. The shop itself pleases us, with its big sign: FIRE DEP'T! PLEASE DON'T USE WATER! and its bathtub which is always kept full of bicarbonate of soda to dip careless clerks in.

What a place is Eimer & Amend! What tragic memories! What understanding! The sprawling old building, where you can step up to the counter and call for enough hydrofluoric acid to eat the cables of the George Washington Bridge; the cobwebbed cellar, where you can wander dreamily among carboys of acetylene and flasks of the oil of amber; the shelves of nitric acid,

whose corks blew off one hot August evening years ago, liberating the death fumes which took the life of the night clerk. There's really nothing to compare with a wholesale chemical firm.

The people who cause the most trouble down there are the people who don't know precisely what they want. There was the customer who came in and asked for lemon salts. Well, lemon salts is a common name for oxalic acid, a poison of no mean strength. But the customer looked so jolly, so good-natured, that the clerk—as he was wrapping up the deadly stuff—couldn't resist asking him what he was going to use it for.

"Lemonade for a picnic," replied the happy consumer. "I am organizing a picnic for two hundred people."

The clerk explained what a dandy picnic oxalic acid would provide, and then changed the order to citric acid, which is the stuff that makes artificial lemonade.

* Reprinted with permission from "The New Yorker."

There is a saying (we use it all the time) that if you can't get it at Eimer & Amend, you can't get it anywhere. About the only things you can't buy there are radium (which is handled by the American Radium Company), heavy water (for which there is no demand), and methylcholanthrene, the new cancer drug, which so few people can spell correctly it isn't worth while to handle. Potassium cyanide and other dreadful substances you can get by the carload. Violet Sharpe, the Lindbergh maid, killed herself with Eimer & Amend sodium cyanide—the firm had to send a man to Jersey to identify the package. Mostly the purchaser doesn't have to explain his desires, but there are certain combinations of chemicals which arouse the suspicions of even an Eimer & Amend clerk. The chances are that if you should go in there and order five gallons of nitric acid, twenty pounds of bismuth, and some copper plates, you would find a federal dick waiting for

you on the corner to ask a few simple questions. Plenty of would-be counterfeiterers have been nipped in the bud just outside the store.

We could listen by the hour to the gruesome chemical stories. One we like is about the Italian woman who wandered in one day carrying a baby and a lump of whitish stuff. She said she wanted "more of this." She held out the sample; as she did so the baby started to drool and she wiped its mouth with her bare fist. Instantly four clerks leaped across the counter, hustled the child into an emergency dressing station, sponged it off, and applied antidotes for cyanide. It turned out that the woman's husband was a goldsmith, and used cyanide all the time in his business.

Mr. Amend is of the opinion that the next war will be fought largely with poison gases, and he hopes the nations will agree on phosgene, not bromine. Phosgene is by far the quicker. (European papers please copy.)

New York Chapter Report

(Continued from page 239)

In conclusion, I may say that we are facing the forthcoming year with enough money in our treasury, or to come from the National treasury, to insure our programs. It is our intention to cooperate to the fullest with the National Membership Committee in a drive for new members, which are absolutely essential if we are to survive under the new dues. We intend holding at least four strong, attractive, general interest meetings during the forthcoming year, and are going to attempt to insure this by a much more forehanded planning program. I do not see that we have lost any ground during the past year, which is quite encouraging in view of general business conditions, and their direct effect upon the finances and morale of the chemist, be he salaried or otherwise.

Respectfully submitted,

B. H. KNIGHT, *Chairman*

Our April Issue

"Witcombings," published by Wishnick-Tumpeer, Inc., in its April-May issue under "Advised Reading," recommends:

"The April issue of THE CHEMIST, that interesting little organ of The American Institute of Chemists, in connection with the Tercentenary Anniversary of the American chemical industry, published a number of interesting articles, such as 'The Contribution of the Chemist to the Printing Ink Industry for the Advancement of Modern Civilization,' by L. F. Engelhart of the International Printing Ink Corporation; 'The Contribution of the Chemist to the Rubber Industry,' by Harry L. Fisher, U. S. Rubber Company; 'The Province of the Paint Chemist,' by Dr. Maximilian Toch, F.A.I.C.; 'The Contribution of the Chemist to the Paint Industry,' by LeRoy D. Soff, F.A.I.C., Chief Chemist, Paragon Paint and Varnish Corporation—all worth reading."

"The broad perspective of your April issue, 'Tercentenary Anniversary of American Chemical Industry,' has appealed to me strongly."

Bernard A. Jaffe, M.D.
St. Louis, Mo.

"Please send me at your earliest convenience twenty copies of the April, 1935, issue of THE CHEMIST. . . I believe they will prove an interesting and valuable souvenir."

Charles F. Smith
Factory Manager
U. S. Rubber Reclaiming Co., Inc.
Buffalo, N. Y.

"We wish to compliment you on the very attractive appearance of this publication and also on the interesting information which it contains."

John A. Lyter
R. and H. Chemicals Dept.
E. I. du Pont de Nemours and Company
Wilmington, Del.

"I have read your April, 1935, issue of THE CHEMIST from cover to cover and I want to congratulate you on getting up the best summary of contributions of chemists to the various industries that I have ever seen. You have done an excellent job and I want to congratulate you."

Sidney M. Cadwell
Director, Tire Development
U. S. Rubber Products, Inc.
Detroit, Mich.

"I have just received my copy of the April edition of THE CHEMIST and wish to congratulate you on the performance of a fine piece of work."

Robert J. Moore
Bakelite Corporation
Bloomfield, N. J.

"I liked your editorial in the April number of THE CHEMIST and want to thank you for it. Your style reminds me of Emerson and I was particularly intrigued with the phrase 'forms appearing upon the frosted glass of life.'"

J. N. Taylor
Chemical Division
Department of Commerce
Washington, D. C.

INSTITUTE NOTES

OFFICERS

M. L. CROSSLEY, *President*

Calco Chemical Co.,

Bound Brook, N. J.

ARTHUR J. HILL, *Vice-President*

HOWARD S. NEIMAN, *Secretary*

233 Broadway

New York, N. Y.

ALAN PORTER LEE, *Treasurer*

COUNCILORS

1936

FRANK G. BREYER

HERBERT R. MOODY

FLORENCE E. WALL

1937

ROSS A. BAKER

WALTER T. TAGGART

FREDERICK W. ZONS

1938

H. T. CLARKE

W. T. READ

N. A. SHEPARD

FREDERICK E. BRITHUT

HENRY G. KNIGHT

CHAPTER REPRESENTATIVES

Philadelphia

New York

Washington

Niagara

M. TRUMPER

LYOYD VAN DOREN

C. W. WHITTAKER

ARTHUR W. BURWELL

Annual Meeting

The thirteenth annual meeting of The American Institute of Chemists, Inc., was held at the Hotel Claridge, Atlantic City, New Jersey, on May 18, 1935, at three o'clock, P. M. President M. L. Crossley presided.

The minutes of the previous annual meeting were read and approved. The Secretary's report for the season 1934-1935 was read and accepted with appreciation of its thoroughness. The Treasurer reported for the year and, upon motion made and seconded, his report was accepted and ordered filed.

In the absence of the Chairman of the New York Chapter, the report of that Chapter was read by the Secretary, and the report accepted. The report of the Pennsylvania Chapter was read by Mr. Stoertz, and the report was accepted. The report of the Washington Chapter was given verbally by the Chairman,

Mr. McBurney, and the report accepted.

The report of the Niagara Chapter was not read, but appears in this issue of THE CHEMIST.

In the absence of the Chairman of the committee, the Secretary read the report of the Committee on Unemployment and Relief for Chemists and Chemical Engineers. On motion made and seconded, the report was accepted. The Secretary read a letter from Mr. W. J. Baëza, Chairman of the New York Chapter Committee on Legislation and, upon motion made and seconded, the report was accepted. The report of the Committee on Constitutional Revision was read by the Secretary in the absence of the Chairman and, upon motion made and seconded, the report was accepted. The report of the Committee on Student Medals was read by the Secretary and,

upon motion made and seconded, the report was accepted.

The Editor of THE CHEMIST reported verbally for the official journal of the Institute to the effect that advertising had been increased; a special anniversary number had been issued; and that he appreciated the assistance of Mr. Neiman, Dr. Crossley, and Miss Kimball. Upon motion made and seconded, this report was accepted.

In the absence of the Chairman of the Committee on Ethics, Mr. Cayo reported verbally for that Committee and, upon motion made and seconded, the report was accepted. The report of the Committee on Membership will appear in a later issue of THE CHEMIST. President Crossley urged each member to cooperate with the Committee on Membership and bring in all who can qualify for Institute membership.

The report of the Tellers on the election ballots was read as follows: Councilors elected for the season 1935-1938: H. T. Clarke, W. T. Read, N. A. Shepard. The emblem which appeared on page 92, in the March issue of THE CHEMIST, was adopted as the official emblem of the Institute.

Mr. Lundstrom, Secretary of the Washington Chapter, proposed the following "Seven Point Plan" for the Institute:

- (1) Select a number of prominent chemists from all over the country, including heads of universities, etc., and offer them honorary membership in the Institute.
- (2) Contact prominent universities, and establish the student medal awards.
- (3) Obtain the cooperation of universities to standardize an acceptable chemistry curriculum.

(4) Establish this standard curriculum in all accredited colleges and universities.

(5) Develop some live issues and objectives. The present one of obtaining government appropriation for the use of unemployed chemists is an acceptable issue.

(6) Make use of the newspapers. Obtain dignified publicity as often as possible. Send news items to the daily press. No need to hide our light under a bushel.

(7) If necessary, arrange assistance so that the work of the Institute can be expedited as much as possible through the Secretary's office.

Upon motion made and seconded, the "Seven Point Plan" was referred to the National Council for study and consideration.

It was moved and seconded that the following resolution be adopted: *Resolved:* That The American Institute of Chemists, Inc., at the Annual Meeting held on May 18, 1935, does hereby accept, confirm, and affirm, all of the acts of the National Council in behalf of The American Institute of Chemists, Inc., during the year ending April 30, 1935. Motion carried. It was moved and seconded that a vote of thanks be extended to Dr. Crossley, the other officers and councilors of the Institute, and those who have assisted the work of the Institute, for their faithful service during the past year. Motion unanimously carried.

Mr. Neiman reminded the meeting that reduced rates were possible on the Dollar Steamship Line for a party wishing to attend the A. C. S. Convention in San Francisco this August. Mr. Lundstrom requested that additional copies of the April CHEMIST, if any, be sent to heads of universities. Adjournment.

National Council

March Meeting

The one-hundred and twentieth meeting of the Council of The American Institute of Chemists was held at The Chemists' Club, 52 East 41st Street, New York, N. Y., on Thursday, March 21, 1935.

President M. L. Crossley presided.

The following Councilors and Officers were present: Messrs. Frank G. Breyer, M. L. Crossley, H. S. Neiman, F. W. Zons, and Miss F. E. Wall. Mr. Charles F. Smith, Jr., of the Niagara Chapter, called and discussed the affairs of that Chapter.

The Treasurer's report showing a cash balance of \$890.52 was read by the Secretary.

Mr. Breyer reported upon the arrangements made for a meeting of The American Institute of Chemists during the American Chemical Society's convention and stated that there would be a report of the Unemployment Committee of the American Chemical Society to the membership on Thursday, April 25, at 11:30 A. M., in the Chelsea Room of the Governor Clinton Hotel, and that arrangements were being made for a luncheon of The American Institute of Chemists at one o'clock on that date at the Hotel Martinique, and that he would speak at that luncheon.

Upon motion made and seconded, the next meeting of the Council was set for Friday, April 26th.

Dr. Zons stated that he would endeavor to make arrangements for the distribution of the special number of THE CHEMIST.

The report of the Committee on Membership was presented and accepted.

A letter from M. R. Miller relating to the licensing of engineers and assayers in California was referred to the Committee on Legislation.

A letter from Mr. Rivise suggesting that a journal of the Institute be substituted for THE CHEMIST, to be issued twice a year was considered and definite action postponed.

Miss Wall was requested to confer with Dr. Ross Baker relative to the matter of student medals, and Miss Wall will draft a by-law regarding student medals.

The following applicants have been reported upon favorably and were elected to membership:

FELLOWS

SANFORD C. DINSMORE, *State Commissioner Foods and Drugs*, State of Nevada, P. O. Box 719, Reno, Nevada.

ALVIN F. SHEPARD, *Research Chemist*, General Plastics, Inc., N. Tonawanda, N. Y.

ASSOCIATES

NORMAN O. LONG, *Graduate Assistant*, Department of Chemistry, University of Buffalo, Buffalo, N. Y.

EDWARD LLEWELLYN RANDALL, *Chemist*, Food and Drug Laboratory, 5th and Sierra Streets, Reno, Nevada.

The Secretary stated that the Pennsylvania Chapter had not reported relative to the place of the Annual Meeting, and he was directed to write the Pennsylvania Chapter relative to this matter.

Upon motion made and seconded, the following tellers were appointed to count and report upon the nomination and election ballots: Dr. Zons and Miss Wall.

The Secretary was requested to notify each Chapter that the student medals are available for this year; that the cost of Junior membership is \$2.00; the price of the medal is \$1.50 plus cost of engraving, which will consist of the school, the name of the recipient, and the date.

There being no further business, adjournment was taken.

April Meeting

The one-hundred and twenty-first meeting of the Council of The American Institute of Chemists was held at The Chemists' Club, 52 East 41st Street, New York, N. Y., on Friday, April 26, 1935. President M. L. Crossley presided.

The following councilors and officers were present: Messrs: M. L. Crossley, H. G. Knight, J. W. McBurney, H. S. Neiman, L. Van Doren, F. W. Zons, and Miss F. E. Wall. Mr. Max Trumper of the Pennsylvania Chapter was also present.

The minutes of the preceding meeting were corrected by removing Dr. Zons's name from the committee appointed to draft a by-law regarding Student Medals.

In the absence of the Treasurer, the Secretary read the Treasurer's report, showing a cash balance as of April 26, 1935, of \$446.80.

The Tellers of the nominations-for-councilors' ballot reported that the following members had been selected to appear on the election ballot: H. T. Clarke, W. T. Read, Frederick Kenney, N. A. Shepard, C. A. Kraus, W. C. Foster, and the report was accepted.

The Secretary read a letter from Harry A. Baker, Professor, John Tarleton Agricultural College, Stephenville, Texas, suggesting a form of medal-insignia, and upon motion made and seconded this was referred to the Committee on Insignia.

The Secretary read a letter from the Secretary of the Washington Chapter. Upon motion made and seconded, the recommendation of the Washington Chapter to reinstate a list of delinquent, dropped, or resigned members upon payment of their present year's dues was accepted, and the following members were reinstated:

ANIS P. BRADSHAW, F.A.I.C., Chemist, Biological Stain Commission, Dept. of Agriculture, Washington, D. C.

P. R. DAWSON, F.A.I.C., Biochemist, Bureau of Chemistry and Soils, Washington, D. C.

R. B. DEEMER, F.A.I.C., 213 Maple Avenue, Takoma Park, Md.

MARSHALL J. GOSS, F.A.I.C., Chemist, Color and Farm Waste Laboratory, Washington, D. C.

MARTIN LEATHERMAN, A.A.I.C., Assoc. Chemist, Bureau of Chemistry and Soils, Washington, D. C.

J. B. MARTIN, F.A.I.C., Soil Fertility Investigations Lab., Bureau of Plant Industry, Washington, D. C.

ORVILLE E. MAY, F.A.I.C., Chemist, Bureau of Chemistry and Soils, Washington, D. C.

ROGER M. MEHURIN, F.A.I.C., Associate Chemist, Bureau of Animal Industry, Washington, D. C.

WILMER C. POWICK, F.A.I.C., Biochemist, Bureau of Animal Industry, Washington, D. C.

J. DAVID REID, J.A.I.C., Research Chemist, Color and Farm Waste Division, Bureau of Chemistry and Soils, Washington, D. C.

C. E. SENSEMAN, F.A.I.C., Chemist, Bureau of Chemistry and Soils, Washington, D. C.

EDWARD F. SNYDER, F.A.I.C., Associate Biochemist, Bureau of Chemistry and Soils, Washington, D. C.

J. J. STUBBS, A.A.I.C., Junior Chemist, Bureau of Chemistry and Soils, Washington, D. C.

GEORGE P. WALTON, F.A.I.C., 6318—33rd Street, N. W., Washington, D. C.

PERCY A. WELLS, J.A.I.C., Assistant Chemist, Color and Farm Waste Division, Bureau of Chemistry and Soils, Washington, D. C.

The Secretary read a letter from the Pennsylvania Chapter concerning arrangements for the Annual Meeting.

On motion made and seconded,

JOHN E. SEUBERT, Senior Chemistry Major, University of Buffalo, Buffalo, N. Y.

was accepted as a Junior member and the granting of the membership and the Student medal by the Niagara Chapter was approved. Mr. McBurney reported that the Washington Chapter had made contacts with a number of universities in reference to the awarding of student medals.

The following new members were elected:

FELLOWS

WAYNE B. ADAMS, *Chemist*, Department of Food and Drugs, University of Nevada, Reno, Nevada.

C. G. DERICK, *Consulting Chemist*, Seward, N. J.

LOUIS WEISBERG, *President*, Weisberg and Greenwald, Inc., 71 W. 45th Street, New York, N. Y.

JUNIOR

KERBY STODDARD, *Fellow in Chemistry*, Agricultural Experiment Station, University of Nevada, Reno, Nevada.

The applications of Louis Lang and F. W. Kinard to be raised from Associates to Fellows were approved.

Dr. Van Doren of the Committee on Constitutional Revision presented a tentative draft of a by-law to cover the awarding of student medals. After discussion and revision, and on motion made and seconded, the following by-law was accepted by the Council:

1. Insert in Heading after Article V a new title:

ARTICLE V-a

Student Medals

2. Insert in the By-Laws after Article V:

ARTICLE V-a

Student Medals of The American Institute of Chemists

Section 1. Medals of bronze or other suitable metal may be presented by The

American Institute of Chemists under the conditions set forth hereafter. These medals shall be known as Student Medals of The American Institute of Chemists and be given in recognition of leadership, excellence in scholarship, and character, for the purpose of stimulating interest in the science of chemistry and the profession of chemist.

Section 2. These awards shall be made by the Council of The American Institute of Chemists, upon the recommendation of the respective Chapters.

Section 3. The award shall be to a senior who is majoring in chemistry at an educational institution of recognized standing.

Section 4. The Council shall determine the number of such awards to be made in each year, and not more than one award shall be conferred in an educational institution in a given year.

Section 5. The recipient of the award in each educational institution shall be recommended from the graduating class thereof by the chemical faculty, in collaboration with the respective Chapter, or in the event that a Chapter is not closely located then in collaboration with the Council of The American Institute of Chemists. They shall be guided in their selection equally by scholarship, and by the personal qualities of integrity and leadership.

Section 6. The award shall be made preferably at the graduating exercises of the class of the recipient and by a Fellow of the Institute. However, the Council may, in its discretion, arrange the presentation in some other appropriate manner.

Section 7. The award of the Medal shall carry with it Junior membership in the Institute for one year.

Section 8. The cost of the medals shall be borne by the Chapter making the recommendations.

The Jury of Medal Award reported that it felt it unwise to give the Institute

medal this year and, on motion made and seconded, it was decided not to award a medal at this time.

A program committee for the annual meeting was appointed to consist of the

Chairman of each Chapter, who would arrange to have his Chapter prepare to discuss a selected topic at the Annual Meeting. There being no further business, adjournment was taken.

May Meeting

The one-hundred and twenty-second meeting of the Council of The American Institute of Chemists was held at the Hotel Claridge, Atlantic City, N. J., on May 18, 1935, at 1 o'clock P. M.

Dr. M. L. Crossley presided.

The following Councilors and Officers were present: Messrs.: M. L. Crossley, A. P. Lee, H. S. Neiman, C. W. Rivise. Messrs. E. F. Cayo and Howard Stoertz, representing the Pennsylvania Chapter, were also present.

The Treasurer's report, showing a cash balance of \$1,152.00, was read.

The Tellers for the election ballots reported the following councilors elected for the period 1935-1938: Hans T. Clarke, W. T. Read, N. A. Shepard.

The Secretary read a letter from the Federation of Architects, Engineers, Chemists, and Technicians, enclosing resolutions requesting the formation of a committee to cooperate with the Federation to alleviate unemployment among chemists.

Upon motion made and seconded, the Secretary was requested to reply that, while we are in sympathy with the resolutions, we already have a committee working on the same problem, and we feel that best results can be obtained for the present by each organization working independently.

The Secretary read a letter from Mr. W. J. Baëza, Secretary of the New York Chapter, relative to student medals to be awarded in universities in New York City and vicinity. Upon motion made and seconded, it was requested that the National Council advise the colleges and

universities recommended by the different chapters that medals are available.

A report from the Secretary of the Washington Chapter was read, recommending that the following students be recipients of the student medals and Junior memberships to be awarded by that Chapter:

HILLMAN C. HARRIS, 2149 California Street, N. W., Washington, D. C.

FRANCIS PATRICK McGRATH, 839—4th Street, N. E., Washington, D. C.

LOUIS ROBERT HEISS, 3621 Ordway Street, N. W., Washington, D. C.

HARRY LAWRENCE CLARK, JR., 1425 Rhode Island Ave., N. W., Washington, D. C.

On motion made and seconded, the recipient of the Washington Chapter's student medal and Junior membership awards were approved.

The following new members were elected:

FELLOWS

ISRAEL SCHWARTZ, *Chief Chemist*, Bendiner and Schlesinger, 10th Street and Third Avenue, New York, N. Y.

FREDERICK L. KOETHEN, *Chemical Engineer*, R. and H. Chemical Division, E. I. du Pont de Nemours, Inc., Niagara Falls, N. Y.

The Secretary read a letter from Howard W. Post, Secretary of the Niagara Chapter, requesting an option on the place of the 1936 meeting of the Institute. On motion made and seconded, the Secretary was requested to advise the Niagara Chapter that no action will be taken until we hear further from them.

Mr. Cayo reported for the Committee on Ethics in regard to a matter that had been brought to its attention, and the Committee was requested to continue its work on this matter and formulate definite points, if possible, wherein the case conflicts with the code of ethics of the Institute.

Dr. Crossley called attention to the re-

duced Fellow dues of the Institute, and requested each Chapter representative to bring as many new members as possible into this Chapter so that the Institute might continue its work without a reduced income.

There being no further business to come before the meeting, adjournment was taken.

Pennsylvania Chapter

The April meeting of the Chapter was held as usual in the Board Room of the Engineers' Club, Philadelphia, Pa., on Tuesday, April 2, 1935, at 8:00 P. M. Mr. Stoertz presided. Mr. Rivise read the minutes of the previous meeting which were approved as read. The Nominating Committee, consisting of Mr. Tyson and Mr. Chapin, reported that Mr. Newitt had been nominated for the Vice-chairmanship of the Chapter. There being no nominations from the floor, Mr. Newitt was unanimously elected.

The officers for the coming year will be: Dr. Max Trumper, *Chairman* (moved up automatically from Vice-chairmanship); Mr. Louis D. Newitt, *Vice-chairman*; Mr. C. W. Rivise, *Secretary and Treasurer*.

Mr. Cayo moved that the Chapter sponsor the Annual Meeting of the Institute to be held on May 18, 1935, at Atlantic City and that the Chapter undertake the arrangements for the meeting. The Secretary was instructed to write the National Secretary, informing him of the action of the Chapter and stating that the Chapter cannot undertake to be responsible financially for the meeting. The National Secretary is also to be requested to inform the Chapter as to the details concerning meeting hours, times for luncheon, and/or dinner and medal presentation. Mr. Stoertz and Mr. Rivise stated that if a reply from New York is received in time, they will go to Atlan-

tic City, Sunday, April 7, 1935, to select a hotel and to make the necessary arrangements.

The principal business of the evening had to do with the new plan of increasing the membership. The chairman pointed out the danger of letting down the bars as to qualifications and asked for suggestions as to how the danger can be avoided. Mr. Kabnick suggested that prospects be approached by their sponsors before their names are submitted. Mr. Cayo discussed the method which he has been following; namely, asking each prospect whether he would accept if elected and then submitting his name to the Institute. Mr. Cayo's plan differs from that suggested by Mr. Kabnick in that the prospect is not given an application until after the Institute decides whether the prospect is eligible.

Mr. Tyson discussed the question of increasing the interest of the members sufficiently so that they would come to the meetings. It was his view that subjects such as "Licensing the Chemist" and other economic questions do not interest the membership. He suggested that purely chemical subjects be discussed at the meetings. The Chapter sitting as a Committee of the whole voted on a list of prospective members and the secretary was instructed to submit the names of those approved by the Chapter to the National Secretary for submission to the Membership Committee.

Mr. Cayo spoke of the changing status of the Technical Service Committee. Starting first as a group to give advice and financial assistance to unemployed technical men, this group is now a regularly licensed employment agent. As such, it has been making a small profit

over and above its expenses. Mr. Chapin who had been appointed as representative to the Technical Service Committee stated that it was impossible for him to serve. After a short discussion, it was decided to ask Mr. Harrison to accept this position.

Washington Chapter

The Washington, D. C., Chapter of the American Institute of Chemists held its third meeting on Friday, March 15th, in the Auditorium of the New American Pharmaceutical Association Building. The meeting was well attended and a large number of visitors were noticed in the audience.

Dr. Wilmer Souder, of the U. S. Bureau of Standards, expert on ballistics and identification of documents, gave an interesting and instructive address entitled "The Technical Man in Court." Dr. Souder, who has testified in several of the recent criminal cases, gave many valuable hints on how to proceed and pitfalls to avoid while appearing as a witness in court. He also exhibited several firearms, examples of handwriting used

in obtaining convictions in recent cases, and described the apparatus and paraphernalia used in this type of investigation. After the address, about fifteen minutes were allowed for questions and further discussion of the subject-matter of the address.

Samples of the Student Medals which were left with the Chapter by Miss Wall on her visit to Washington on March 2nd, were exhibited and a motion to adopt the policy of the National Council regarding Student Medals was passed.

After the meeting, the members and guests were conducted on an inspection tour of the beautiful building which, aside from being the National Headquarters of the American Pharmaceutical Association, also contains many exhibits.

The Washington, D. C., Chapter of the American Institute of Chemists held its fourth meeting on Friday, April 19th, in the Lecture Room, Chemistry Building, U. S. Bureau of Standards.

The meeting, which was well attended, was called to order at 8:15 P. M. Mr. J. W. McBurney, President of the Chapter, presided.

Dr. Paul R. Heyl, of the Bureau of Standards, eminent physicist, writer, and lecturer, addressed the Chapter most interestingly on the subject, "Science and Philosophy." Early philosophic concepts, especially those concerning natural science, were reviewed. The evolution

of these earlier ideas into those of the present, the status of the Einstein Theory and what may be expected in the future were covered briefly in the course of the address.

The Chairman of the Chapter's Medal Awards Committee reported that the universities, in which Medals and Junior Memberships are to be awarded, will be contacted in the near future.

It was suggested that the members of the Institute communicate with their friends who are taking postgraduate work in the various institutions of learning throughout the country, and describe the Institute, its objects, etc., with

a view to establishing new chapters and increasing the national membership.

Nominations were also made for Chapter officers for the year 1935-1936.

The Washington, D. C., Chapter of the American Institute of Chemists held its fifth meeting on Friday, May 17th, in the Board Room of the Cosmos Club.

The following officers were elected for 1935-36: C. E. Monroe, *Honorary President*; C. W. Whittaker, *President*; L. N. Markwood, *Vice-president*; F. O. Lundstrom, *Secretary*; J. H. Hibben, *Treasurer*.

This was a business meeting. Various reports of the Chapter's activities were made. A report by the Secretary concerning the Student Medal and Junior Membership awards indicated that all five of the universities that were approached had accepted the plan with en-

thusiasm. Several of the letters received from the university presidents and other officials of these institutions were read.

Mr. McBurney, the outgoing President of the Chapter, expressed his thanks for the cooperation that he had received during the past year and stated that he had enjoyed the privilege of serving the Chapter as President.

A number of former members of the Chapter have either rejoined or will do so in the near future. Several others, also, have signified their intention of making application for membership in the Institute. The future outlook for the Chapter appears most encouraging at this time.

Niagara Chapter

The 11th regular meeting of the Niagara Chapter was called to order by the Chairman, Arthur J. Norton, at Snyder's Tea Room, Williamsville, N. Y. for dinner, at 6:30 P. M., Friday, May 3, 1935. Twenty-one were present including the following guests—Mr. Charles Georgi of the Sun Oil Co., Dr. Charles Harte of the staff of Industrial and Engineering Chemistry, Mr. Clyde P. Wells, Superintendent of Schools, Batavia, N. Y., and Dr. A. E. Shepard, former Assistant Superintendent of Schools of Buffalo. At the conclusion of the dinner, William B. Brown introduced Mr. John Seubert, winner of the Niagara Chapter Student Medal and Junior Membership Award. The Treasurer reported for the year ending May 15, 1935. After brief remarks by the present and incoming Chairman of the Chapter, the meeting adjourned to the home of Groves H. Cartledge for the program.

The subject of the discussion was "Educational Requirements for Sec-

dary School Teaching," with the following as contributors:

1. Introduction—William R. Sheridan, Chairman, Committee on Professional Education.
2. Attitude of the American Chemical Society—Howard W. Post.
3. Attitude of the Universities—Groves H. Cartledge.
4. Primary Education—Alvin E. Shepard.
5. Secondary Education—Clyde P. Wells.
6. Attitude of the Industries—Carl Rasch.

The Niagara Chapter announces the following officers for the season 1935-1936: *Chairman*: Charles F. Smith, F.A.I.C.; *Vice-chairman*: Groves H. Cartledge, F.A.I.C.; *Secretary-treasurer*: Howard W. Post, F.A.I.C.; *Chapter Representative to National Council*: Arthur W. Burwell, F.A.I.C.

Our New Members

WAYNE B. ADAMS, F.A.I.C., has studied at Michigan State College and holds a degree from the University of Nevada. He specializes in organic analysis of foods and drugs, has published a number of articles in his field, and is employed in the Food and Drug Department of the University of Nevada. He served in the Chemical Warfare Service during the war.

C. G. DERICK, F.A.I.C., specializes in the chemistry of dyes, and contributed an excellent summary of the history of the dyestuff industry in America to the April issue of THE CHEMIST. He is a Consulting Chemist at Sewaren, N. J.

SANFORD C. DINSMORE, F.A.I.C., received a degree from the University of Maine. State Commissioner of Foods and Drugs for 30 years at Reno, Nevada, he has published many bulletins concerning his work.

FREDERICK L. KOETHEN, F.A.I.C., graduated from the Carnegie Institute of Technology, and has been in charge of development and manufacturing for several large corporations. He is at present a Chemical Engineer with R. and H. Chemical Division of E. I. du Pont de Nemours and Company at Niagara Falls, N. Y.

NORMAN O. LONG, A.A.I.C., holds degrees from Hiram College and the University of Buffalo. He is at present a Graduate Assistant in the Department of Chemistry of the University of Buffalo, Buffalo, N. Y.

EDWARD L. RANDALL, A.A.I.C., has degrees from the University of Nevada and the University of Michigan. Employed in the Food and Drug Laboratory of Reno, Nevada, he has had an article published in the Journal of Biological Chemistry.

KIRBY STODDARD, J.A.I.C., graduated from the University of Nevada, and is now a Fellow in Chemistry in the Agricultural Experiment Station of that University at Reno, Nevada.

ISRAEL SCHWARTZ, F.A.I.C., holds degrees from the College of Pharmacy at Columbia University and Brooklyn College of Pharmacy. Chief Chemist of Bendiner and Schlesinger, New York, N. Y., he specializes in industrial analyses, foods, drugs, water, physiological chemistry, and bacteriology.

ALVIN F. SHEPARD, F.A.I.C., received two degrees from Cornell University, and is the author of many publications in the field of organic chemistry. He is employed as a Research Chemist with General Plastics, Inc., N. Tonawanda, New York.

LOUIS WEISBERG, F.A.I.C., holds degrees from the University of Texas and Massachusetts Institute of Technology. He specializes in physical chemistry, with particular emphasis on electrochemistry and synthetic resins. President of Weisberg and Greenwald, Inc., New York, N. Y., he has written many publications and holds numerous patents.

Correction

The article entitled "The Professional Chemist as Teacher" which appeared in the March issue of THE CHEMIST was credited in error to Dr. Samuel Weisberg. The author is Dr. Howard W. Post.

NEWS

At the New York University Chapter meeting of Sigma Xi held on May 6th, Professor Alexander O. Gettler spoke on *Newer Methods in Toxicology*. Opening his talk with the subject of his work in determining the presence of alcohol in living tissues, he exhibited the glassware in use in his laboratory for micro-extraction of the minute amounts of "normal alcohol" present in the tissues of animals and tee-totaling humans.

He spoke of carbon monoxide, chloroform, ether, benzene, and their isolation by micro methods.

He described his own laboratory

method for conclusively proving death as due to drowning. It is based upon the increased or decreased chloride content of the blood of the left side of the heart, depending upon the medium in which the drowning occurred, while the chloride content of the blood of the right side of the heart remains unchanged.

Dr. Gettler presented actual cases from the files of the Chief Medical Examiner's Office of New York in which homicide, murder, and even suicide had been camouflaged to appear like accidental deaths or like natural deaths, but were cleared up by laboratory work.

The Johns Hopkins University Research Conferences on Chemical Problems

The Chemistry Department of the Johns Hopkins University is holding its fifth Research Conference this summer at Gibson Island near Baltimore. The conference will be under the general direction of E. Emmet Reid and will run three weeks—June 24th to July 12th. The plan is flexible, varying from day to day according to the nature of the topic under discussion and the wishes of those participating. The day begins with a more or less formal lecture outlining some field of research and directing attention to its unsolved problems. This is followed by a discussion in which each one present takes part, making what contribution he can to the solution of the problems presented. The idea is to have a group large enough that all points of view may be represented, yet small enough that all who wish may take active part. The plan is to have recognized leaders in each field of research to

give the lectures and start the discussions, but its success depends on having a number in the group who are capable of contributing ideas. The remainder of the day is left to sports or conversations. These conferences are intended to combine mental stimulation, pleasant personal contacts, and healthful recreation. The Gibson Island Club generously shares its facilities with scientists for this period. The club has an excellent golf course, fine tennis courts, splendid swimming and beaches, with ample dressing rooms and commodious club house. There is excellent fishing in the surrounding Chesapeake. Attendants on the conferences may secure rooms in the club house or in adjacent cottages or may come from Baltimore for the day. Meals for all are served at the club house.

The conferences are for three weeks on three fields of organic chemistry. The program given below is to be regarded as

a tentative outline to be filled in or modified as may seem best.

1. "The Chemistry of the Aliphatic Free Radicals." Professor FRANCIS O. RICE. June 24th-28th.

The week's conferences will include a series of lectures and discussion on (1) the preparation and properties of free aliphatic radicals, (2) the mechanism of thermal decompositions from the free radical standpoint, and (3) the Haber-Willstätter chain mechanism applied to reaction in solution.

2. "Long Chain Molecules." Dr. THOMAS MIDGLEY, JR. July 1st-5th.

July 1st. Formation of polymers by definite chemical reactions; rings and string molecules. Dr. W. H. Carothers.

July 2nd. Synthetic rubber, Duprene, and Thiokol. Dr. W. H. Carothers and Dr. J. C. Patrick.

July 3rd. The determination of molecular weights of big molecules. Dr. E. O. Kraemer.

July 4th. Cellulose. Dr. E. O. Kraemer.

July 5th. Rubber. Dr. T. Midgley, Jr.

3. "Vitamins." Dr. E. V. McCOLLUM. July 8th-12th.

These conferences consist of lectures and discussion grouped around work in progress on vitamins.

July 8th. Vitamin A. Dr. E. V. McCollum.

July 9th. Vitamin B. Dr. R. R. Williams.

July 10th. Vitamin C. Dr. C. G. King.

July 11th. Vitamin D. Dr. C. E. Bills.

July 12th. Vitamin G. Dr. H. C. Sherman.

Further information may be secured from NEIL E. GORDON, Department of Chemistry, The Johns Hopkins University.

Thomas A. Wrigat of Lucius Pitkin, Inc., addressed the New York Section of The American Association of Cereal Chemists on "The Role of the Spectrograph in Detecting and Determining Metals in Foods" on May 7th at the McGraw-Hill Building.

Florence E. Wall, F.A.I.C., gave the

Commencement address at the College of St. Elizabeth, Morristown, N. J. Her subject was "Woman in a World of Science." This marked an appropriate occasion for the presentation of the newly established student medal of the Institute to Hannah Elizabeth Chelius of Bayonne, N. J. Miss Chelius is the only woman among this year's student medal recipients.

The Institute has just been notified of the recent death of Irwin Cole, F.A.I.C., who is survived by his wife, son, and daughter. Mr. Cole was a graduate of Brooklyn Polytechnic Institute, and specialized in pharmaceutical and dye chemistry.

Objectives of the American Institute of Chemists

To give chemists professional solidarity.

To put the profession back of a definite code of ethics.

To insist on adequate training and experience qualifications.

To educate the public to an understanding of what a chemist is.

To protect the public and the profession by fighting quackery.

To raise the economic status of chemists.

.....
HOWARD S. NEIMAN, *Secretary*
The American Institute of Chemists
233 Broadway
New York, N. Y.

Please send me an application blank for membership in the American Institute of Chemists.

Name.....

Position.....

Address.....

City..... State.....

HIGHEST COMMERCIAL VACUUM

Without Moving Parts or Maintenance



Chemical engineers who use vacuum for distillation, evaporation, crystallizing, drying, deodorizing, cooling, etc., are rapidly adopting Steam Jet Evactors. The total absence of moving parts is a big advantage in eliminating maintenance and expensive shut-downs. The jet of steam moving at high velocity entrains the low density vapors from any high vacuum vessel much more efficiently than is possible with a rotary or reciprocating vacuum pump. The operating cost therefore is definitely lower and fortunately the first cost is also lower.

Twenty years ago the majority of power plant condensers used rotary or reciprocating vacuum pumps. Today the change to steam jets has been practically one hundred per cent. Chemical engineers, having a larger variety of problems than power plant engineers, have been somewhat slower to take advantage of the obvious savings which Steam Jet Evactors offer. However, the trend is definite and many modern manufacturing plants now use no other type of vacuum producer.

Evactors are furnished in one, two or three stages, depending on the vacuum and capacity. Literature will be furnished promptly on request, also engineering suggestions based on twenty years' experience in applying this equipment to practically every kind of industrial vacuum process.

CROLL-REYNOLDS CO., Inc.

17 John St., New York

Phone Cortlandt 7-2793

REPRESENTATIVES IN PRINCIPAL CITIES

